

ABSTRACT OF THE DISCLOSURE

The invention is an electrochemical cell made of a first electrode, a second electrode, and a curable liquid electrolyte located between the first and second electrodes, wherein the curable liquid electrolyte is made of a protonic polymer having a polymeric backbone with side chains
5 with acidic groups for conducting proton for an electrochemical cell, a first vinyl monomer with a $-(COOH)-$ group, and a cross linking agent with a second vinyl monomer.